

AMENDMENT TO THE CLAIMS

This listing of the claims replaces all prior versions and listings of the claims in the application.

1. (Currently Amended) A method comprising:

analyzing a plurality of database access statements that were issued for an application ~~in~~ during use[;]] to determine previous determining accessed items and types of access for the application ~~based on the issued database access statements for the application;~~ and

developing a role ~~associated with~~ for the application based on the previous determined accessed items and types of access for the application, wherein ~~the role allows a user database access when the user is associated with the application is in use by a user, the developed role for the application allows the user database access.~~

2. (Currently Amended) The method of claim 1 wherein analyzing the issued database access statements comprises:

capturing the plurality of database access statements;  
normalizing the captured database access statements; and  
eliminating redundancies in the normalized database access statements.

3. (Original) The method of claim 2 wherein the database access statements comprise Structured Query Language (SQL) queries.

4. (Currently Amended) The method of claim 1 wherein the determined previous accessed items and types of access include objects accessed and operations performed on the objects.

5. (Currently Amended) The method of claim 1 wherein developing a role comprises determining permissions for the application based on the determined previous accessed items and types of access.

6. (Original) The method of claim 1 further comprising determining which of a set of users are authorized to use the application.
7. (Currently Amended) The method of claim 1 further comprising:  
detecting a user request to establish an application session;  
finding the role ~~associated with~~ for the application; and  
assigning the role to a user.
8. (Original) The method of claim 7 wherein detecting a user request to establish an application session comprises determining if a user is authorized to use the application.
9. (Original) The method of claim 7 further comprising:  
detecting an end of the application session; and  
if an end of the application session is detected, disabling the assigned role for the user.

10. (Currently Amended) An article comprising a machine-readable medium storing instructions operable to cause one or more machines to perform operations comprising:

analyzing a plurality of database access statements that were issued for an application ~~in~~ during use[;]] to determine previous determining accessed items and types of access for the application ~~based on the issued database access statements for the application~~; and

developing a role ~~associated with~~ for the application based on the previous determined accessed items and types of access for the application, wherein ~~the role allows a user database access when the user is associated the application is in use by a user, the developed role for the application allows the user database access.~~

11. (Currently Amended) The article of claim 10, wherein analyzing the issued database access statements comprises:

determining whether the plurality of database access statements have been captured;  
normalizing the captured database access statements; and  
eliminating redundancies in the normalized database access statements.

12. (Currently Amended) The article of claim 10 wherein the previous determined accessed items and types of access include objects accessed and operations performed on the objects.

13. (Currently Amended) The article of claim 10 wherein developing a role comprises determining permissions for the application based on the previous determined accessed items and types of access.

14. (Original) The article of claim 10 wherein the instructions are further operable to cause one or more machines to perform operations comprising determining which of a set of users are authorized to use the application.

15. (Currently Amended) The article of claim 10 wherein the instructions are further operable to cause one or more machines to perform operations comprising:

determining whether a user request to establish an application session has been detected;

finding the role associated with for the application; and  
assigning the role to a user.

16. (Original) The article of claim 15 wherein detecting a user request to establish an application session comprises determining if a user is authorized to use the application.

17. (Original) The article of claim 15 wherein the instructions are further operable to cause one or more machines to perform operations comprising:

detecting an end of the application session; and  
if an end of the application session is detected, disabling the assigned role for the user.

18. (Currently Amended) A database security analyzer comprising:  
a communication interface operable to receive a plurality of database access statements  
that were issued for an application in during use;  
a memory operable to store the issued database access statements; and  
a processor operable to develop a role associated with for the application based on the  
previously issued database access statements for the application, wherein when the application is  
in use by a user, the developed role for the application allows a user database access when using  
the application.
19. (Currently Amended) The analyzer of claim 18 wherein developing a role comprises:  
analyzing the database access statements to determine previous determining accessed  
items and types of access for ~~an~~ the application based on the issued database access statements  
for the application;  
determining permissions for the application based on the previous determined accessed  
items and types of access for the application; and  
developing a role associated with the application based on the determined permissions.
20. (Currently Amended) The analyzer of claim 19 wherein the previous determined  
accessed items and types of access include objects accessed and operations performed on the  
objects.
21. (Currently Amended) The analyzer of claim 18 wherein developing a role comprises:  
determining whether issued the received database access statements have been captured;  
normalizing the captured database access statements; and  
eliminating redundancies in the normalized database access statements.
22. (Original) The analyzer of claim 18 wherein the memory comprises instructions, and the  
processor operates according to the instructions.

23. (Currently Amended) A method comprising:

capturing ~~the a plurality of~~ database access statements ~~that were~~ issued for one or more applications ~~in~~ ~~during~~ use, wherein the database access statements comprise Structured Query Language (SQL) queries;

normalizing the ~~issued~~ ~~captured~~ database access statements;

eliminating redundancies in the normalized database access statements;

~~analyzing the normalized database access statements to determine previous determining~~ accessed items and types of access for an application ~~based on the issued database access statements for the application~~, wherein the ~~previous~~ determined accessed items and types of access include objects accessed and operations performed on the objects;

determining permissions for the application based on the ~~previous~~ accessed items and types of access ~~for the application~~;

developing a role ~~associated with~~ ~~for~~ the application based on the ~~developed~~ ~~determined~~ permissions;

determining which of a set of users are authorized to use the application;

detecting a user request to establish a session of the application;

determining if the user is authorized to use the application;

if the user is authorized to use the application, finding the ~~role-associated with~~ ~~for~~ the application;

assigning the role to the user;

detecting an end of the application session; and

if an end of the application session is detected, disabling the assigned role for the user.